NCA
VOC FOR IOP/FN
BACKGROUNDER NO. 1-0150 FEBRUARY 10, 1976
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THE AGONY OF A DECISION

ANNCR:

THE DIRECTOR OF THE U.S. NATIONAL INSTITUTES OF HEALTH IS FACED WITH THE AGONIZING DECISION, WHETHER TO PERMIT GOVERNMENT-FUNDED BIOLOGICAL EXPERIMENTS COMBINING GENETIC MATERIAL FROM MOLECULES OF DIFFERENT SPECIES. VOA SCIENCE EDITOR LASZLO DOSA HAS THIS BACKGROUND REPORT.

VOICE:

BIOLOGISTS ARE ON THE TRESHOLD OF GENETIC MANIPULATION, TAKING COMPONENTS FROM GENES OF DIFFERENT SPECIES AND RECOMBING THESE INTO NEW FORMS OF LIFE. THE PROSPECTS OF THIS LINE OF RESEARCH ARE STAGGERING.

IF THE SCIENTISTS SUCCEED, THEY MAY BE ABLE TO STOP THE AGING PROCESS, OR CREATE NEW PLANTS WHICH TAKE THE NITROGEN DIRECTLY OUT OF THE AIR, ELIMINATING THE NEED FOR EXPENSIVE AND SCARCE FERTILIZERS. BUT SUCCESS IN THE LABORATORY MAY ALSO LEAD TO NIGHTMARISH RESULTS, SUCH AS THE CREATION OF NEW VIRUSES OR BACTERIA CAPABLE OF RESISTING ALL KNOWN COUNTERMEASURES, WITH THE REAL POSSIBILITY OF WIPING OUT ENTIRE POPULATIONS.

THE DEBATE ON WHETHER THIS KIND OF RESEARCH SHOULD BE PERMITTED, AND IF PERMITTED, UNDER WHAT CONDITIONS, HAS GENERATED SHARP DIVISIONS WITHIN THE SCIENTIFIC COMMUNITY. THERE ARE THOSE WHO WANT TO BAN SUCH RESEARCH ENTIRELY, WHILE OTHERS BELIEVE THAT SCIENTIFIC PROGRESS CANNOT AND SHOULD NOT BE HALTED AND THE RESEARCH OUGHT TO CONTINUE

UNDER STRICT GUIDELINES TO ASSURE THE SAFETY OF THE RESEARCHERS AND THE PUBLIC ALIKE.

IN JULY 1974, A GROUP OF AMERICAN SCIENTISTS CALLED FOR A VOLUNTARY MORATORIUM ON RECOMBINANT DNA MOLECULE RESEARCH -- AS THIS ACTIVITY IS CALLED -- UNTIL THE POTENTIAL HAZARDS HAVE BEEN BETTER EVALUATED. ONE YEAR AGO, SCIENTISTS FROM FIFTEEN NATIONS MET IS ASILOMAR, CALIFORNIA, TO DISCUSS THE PROBLEM. THE ASILOMAR CONFERENCE RECOMMENDED THAT RESEARCH SHOULD CONTINUE UNDER RIGOROUS SAFEGUARDS, EXCEPT FOR CERTAIN EXPERIMENTS WHICH WOULD POSE EXTREMELY SERIOUS DANGERS. LAST JULY, AN ADVISORY COMMITTEE OF THE WORLD HEALTH ORGANIZATION TOOK A SIMILAR STAND, SAYING THAT "THE CONTINUATION OF MICROBIOLOGICAL RESEARCH, INCLUDING GENETIC MANIPULATION AND CELL FUSION STUDIES, IS OF UTMOST IMPORTANCE FOR PROGRESS IN MEDICINE AND PUBLIC HEALTH."

MEANWHILE, IN THE UNITED STATES, THE DIRECTOR OF THE NATIONAL INSTITUTES OF HEALTH APPOINTED AN ADVISORY COMMITTEE TO OVERSEE THIS LINE OF RESEARCH AND TO DEVELOP GUIDELINES FOR ITS SAFETY.

THE ADVISORY COMMITTEE MET THIS WEEK TO UNVEIL ITS GUIDELINES AND DISCUSS THEM WITH DOCTOR DONALD FREDRICKSON, THE DIRECTOR OF THE NATIONAL INSTITUTES OF HEALTH. THE GUIDELINES FOLLOW THE RECOMMENDATIONS MADE AT THE ASILOMAR CONFERENCE ONE YEAR AGO, BUT THE ADVICE GIVEN TO DOCTOR FREDRICKSON BY HIS COMMITTEE IS BY NO MEANS UNANIMOUS.

WHATEVER HIS DECISION MAY BE, IT WILL CARRY GREAT WEIGHT, BECAUSE IT WILL BE BINDING ON ALL BIOLOGICAL RESEARCH AT AMERICAN UNIVERSITIES AND OTHER INSTITUTIONS

WHICH RECEIVE FUNDS FROM THE FEDERAL GOVERNMENT. AND IT IS EXPECTED THAT OTHER COUNTRIES WILL ALSO FOLLOW THE GUIDELINES TO BE PROMULGATED FOR RECOMBINANT D-N-A RESEARCH BY THE U.S. GOVERNMENT.

(OPT) CALIFORNIA INSTITUTE OF TECHNOLOGY BIOLOGIST ROBERT SINSHEIMER TOLD DOCTOR FREDRICKSON THAT HIS DECISION WILL REPRESENT A TURNING POINT IN BIOLOGICAL RESEARCH AND IT WILL BE IRREVERSIBLE BECAUSE THE NEWLY CREATED LIFE FORMS WILL FIND THEIR WAY INTO THE ENVIRONMENT, NO MATTER HOW STRICT THE SAFEGUARDS MAY BE.

ANOTHER MEMBER OF THE ADVISORY COMMITTEE, QUESTIONED WHETHER THERE IS A MORAL OBLIGATION FOR THIS LINE OF RESEARCH. THE NEXT SPEAKER, A LAWYER, ANSWERED HIM IMMEDIATELY, SAYING THAT THERE IS A MORAL OBLIGATION TO PREVENT HARM AND INACTION, THAT IS, FAILURE TO ESTABLISH RESEARCH GUIDELINES MAY BE IMMORAL IN THIS CASE. (END OPT)

THE MOST VOCAL OPPOSITION TO RECOMBINANT D-N-A RESEARCH CAME FROM SOME ENVIRONMENTALISTS AND A GROUP OF YOUNG SCIENTISTS. PRESIDENT PHILIP HANDLER, OF THE U.S. NATIONAL ACADEMY OF SCIENCES, FOUND IT TROUBLING THAT, IN AN APPARENT REVERSAL OF ROLES, THIS TIME THE YOUNG PEOPLE SEEM TO REPRESENT THE CONSERVATIVE POINT OF VIEW, WITH THEIR ELDERS TAKING THE SIDE OF SCIENTIFIC PROGRESS. ACCORDING TO DOCTOR HANDLER, THE SCIENTIFIC WORK WITH RECOMBINANT D-N-A SHOULD GO FORWARD, ONLY THE PACE OF THAT WORK SHOULD BE A SUBJECT OF DEBATE.

DIRECTOR FREDRICKSON OF THE NATIONAL INSTITUTES OF HEALTH IS THE MAN WHO MUST MAKE THE FINAL DECISION. HE HAS A DIFFICULT, AGONIZING TASK BECAUSE, AS ONE OF HIS

COLLEAGUES OBSERVED, HE MUST DECIDE THE CONTEST BETWEEN THE SPECULATIVE BENEFITS AND IMAGINED HAZARDS OF GENETIC MANIPULATION.

JS/PY